C. japonica var. gracilis TAGAWA ほそばのいはがねさう

いはがねさうニ比シ羽片ハ 遙ニ細ク元幅 1 乃至 1.5 糎、從ツテ側脈ハ著シク斜上シテキル。 脈序ハいはがねさうト同ジク網目隙ハ澤山ニアル。鋸歯ハズツト低平デアル。最下ノ羽片ハ分岐シテキナイカ又ハ 2 岐 3 岐シテキル。 明瞭ナ獨立種ノヤウニモ思ハレルガ、いはがねさり羽片ノ細イモノハヨホドコレニ近ヅクノデ變種ニシタ。 奄美大島ノ特産。

Anogramma Link はにからくさ屬

A leptophylla Link はにからくさ

全世界ノ熱帶溫帶ニ廣ク分布シテキルガ、我邦デモ近年鈴木時夫氏ガ臺灣デ發見セラレタ。コノ屬ノ植物ハ今日ノ所我邦デハコノはにからくさ一種シカナイ。

Gymnopteris Bernh びろうどきじのを屬

G. vestita UND. びろうどきじのを

コレモ近年鈴木時夫氏ガ臺灣中部ノ高山デ發見セラレタ珍種。 海外デハ<u>ヒマラヤ</u>地方 ヤ支那ニアル。

Hemionitis L. いぬあみしだ屬

・ H. arifolia Moore いぬあみしだ

亜細亜ノ熱帶ニハ廣ク分布シテキル種類デアルガ、臺灣デハ稀ナノカ筆者ハ高雄州鳳 山郡産ノ標本ヲ一枚ミタキリデアル。

Miscellaneous Notes on the East Asiatic Uredinales with Special Reference to the Japanese Species (V)

By

Naohide HIRATSUKA

平塚直秀: 東亞銹菌類雜考(其五)

94) Puccinia Makiana Hiratsuka, f. nov. spec.

Soris teleutosporiferis amphigenis, plerumque epiphyllis, sparsis vel aggregatis, saepe confluentibus, minutis, rotundatis, $0.1\sim0.6$ mm diam., compactis, tectis, duris, atro-brunneis vel atris; paraphysibus numerosis coalitis, brunneolis; teleutosporis clavatis vel lineari-clavatis, apice truncatis, rotundatis vel acutiusculis, incrassatis $(4\sim6\,\mu)$, medio non vel parum constrictis,

basi in pedicellum attenuatis, levibus, flavo-brunneis, apice obscurioribus, $45\sim63\times12\sim18\,\mu$; pedicello brevi, persistenti, brunneolo.

Hab. On Scrophularia nodosa L. (O-hinanousutsubo), Kiushû:-Pro. Chikuzen:-Raizan (Sept. 26, 1936, Y. Maki, type!).

• 95) Puccinia Hemerocallidis Thümen in Bull. Soc. Imp. Nat. Moscou, LV, p. 81, 1880.

Syn. Aecidium Patriniæ Hennings in Hedwigia, XLI, p. (21), 1902.

Hab. On Patrinia scabiosaefolia Link (Ominaeshi). Honshû:- Prov. Inaba: Inabayama near Tottori (June 17, 1938, Hiratsuka, f. & M. Irie); Ajiromura (May 9, 1937, I. Кічонака). Shikoku:- Prov. Tosa: Kuroiwa-mura (Мау, 1901, T. Toshinaga, type of Aecidium Patriniæ P. Henn.!)

In 1913, W. Tranzschell' first proved by inoculations, that the aecidial stage of Puccinia Hemerocallidis Thüm. is Aecidium Patriniæ P. Henn. He inoculated with sporidia from the teleutospores on Hemerocallis minor Mill. (H. graminea Turcz.) which were collected by Mr. Michno in Transbaicalia, on Patrinia rupestris Juss., P. scabiosæfolia Link and Valeriana officinalis L., and obtained successful results on the former two species of Patrinia. But, the aecidial connection of this species has never been proved with Japanese material up to the present.

In June 1938, the writer attempted to make inoculations with aecidiospores from Patrinia scabiosæfolia on Hemerocallis disticha Donn (Nokwanzô). The aecidiospores from the aecidia on leaves of Patrinia scabiosaefolia which had been collected by the writer at Inabayama near Tottori City on June 17, 1938 were used as an inoculum. On the next day, the aecidiospores were sown on leaves of Hemerocallis disticha which was potted in the laboratory. Fifteen days after inoculation, numerous uredosori began to appear on the inoculated surface of leaves, and after four weeks, teleutospores developed on the same portion of the leaves.

96) Puccinia toyohirensis Hiratsuka, f. nov. spec.

Soris teleutosporiferis amphigenis, plerumque hypophyllis, sparsis vel aggregatis, oblongis vel linearibus, saepe confluentibus, crassis, compactis,

¹⁾ Mycologisches Centralblatt, IV, p. 70, 1914.

atro-brunneis vel atris; teleutosporis oblongis vel oblongo-clavatis, apice rotundatis vel sæpius conico-attenuatis, incrassatis (usque 12μ), medio vix vel parum constrictis, basi attenuatis, levibus, brunneis, $45\sim65\times18\sim23 \mu$; pedicello persistenti, flavido, usque 110μ longo.

Hab. On Cyperus orthostachyus Franch. et Sav. (Cyperus truncatus Turcz. var. robustus Nakai) (Ushi-kugu). Hokkaidô:- Prov. Ishikari: Riverside of the Toyohira, Sapporo (Nov. 3, 1925, Hiratsuka, f. type!).

- 97) Puccinia Polygoni-amphibii Persoon, Syn. Fung. p. 227, 1801.
- Hab. On Persicaria Thunbergii Nakai var. typica Онкі (Mizo-soba). S. Saghalien:-Ôdomari; Nagahama-mura (Oct. 9, 1938, Naoharu Нікатѕика). New to Saghalien!
- 98) Puccinia Dianthi-japonici Hennings in Engl. Bot. Jahrb. XXXIV, p. 595, 1905.

Hab. On Dianthus japonicus Thunb. (Fuji-nadeshiko). Honshû:-Prov. Kii: Seto-Kanayama-mura (Dec. 23, 1938, Hiratsuka, f.); Wakayama-shi (Nov. 27, 1938, E. Tobinaga); Kimiidera (May 16, 1937, E. Tobinaga); Wabuka-mura (Nishimuro-gun) (July 18, 1933, T. Yoshinaga). New to Honshû!

99) **Puccinia Glyceriæ** Ito in Jour. Coll. Tohoku Imp. Univ. III, p. 200 & pl. XI, fig. 2, 1909.

Hab. On Glyceria lithuanica Lindm. (Karafuto-dojyôtsunagi). Hokkaidô:-Prov. Ishikari; Mt. Kuro-dake (Aug. 4, 1925, Hiratsuka, f.). Glyceria lithuanica is a new host plant for this species!

100) Puccinia oahuensis Ellis et Everhart in Bull. Torr. Bot. Club, XX, p. 425, 1895.

Hab. On Syntherisma sanguinalis Dulac. var. ciliaris Honda (Mehishiba). Honshû:-Prov. Kii: Wakayama-shi (Oct. 30 & Nov. 7, 1938, E. Tobinaga). New to Honshû!

101) Puccinia Kyllingiæ-brevifoliæ Miura in Ito & Homma in Transact. Sapporo Nat. Hist. Soc. XV, p. 128, 1938.

Hab. On Kyllingia brevifolia ROTTB. (Hime-kugu). Honshû:-Prov. Kii: Nishiwasa-mura (Nov. 2, 1938, E. Tobinaga). New to Honshû!

102) Puccinia mandshurica MIURA, Flora of Manchuria & East Mongolia, III, p. 308 & pl. IV, fig. G, 1928.

Hab. On Carex siderosticta Hance. (Taganesô). Honshû:-Prov. Kii: Okazaki-mura (Nov. 14, 1938, E. Tobinaga). New to Honshû!

103) Puccinia Ainsliaeæ Sydow, Monogr. Ured. I, p. 6, 1902.

Syn. Puccinia niitakensis HIRATSUKA, f. et HASHIOKA in Bot. Mag. Tokyo, XLVIII, p. 233 & text-fig. 1, b, 1934. (nov. synom.)

Hab. On Ainslia reflexa MERR. (Taiwan-haguma). Formosa:-Prov. Taihoku: Kirettoi (Mt. Nanko) (July 28, 1934, Y. Hashioka). Prov. Shinchiku: Mt. Izawa (Taiha Mts.) (July 14, 1935, Y. Hashioka).

On Ainsliæa reflexa var. nimborum Handel-Mazzetti (Ainsliæa morrisonicola Hayata) (Okada-haguma). Formosa:-Prov. Shinchiku: Mt. Taiha (July 17, 1935, Y. Hashioka). Prov. Tainan: Mt. Niitaka (July 9, 1933, Y. Hashioka, type of Puccinia niitakensis Hiratsuka, f. et Hashioka!).

104) Uromyces Ervi (Walle.) Westendorp in Bull. Acad. Roy. Sci. de Belg. XXI, pt. 2, p. 246, 1854.

. Syn. Uromyces Fabæ (not DE BARY) (LIEU & WANG in Contrib. Inst. Bot., National Acad. Peiping, III, p. 27 & pl. VI, fig. 3, b, 1935; Sydow in Ann. Myc. XXVII, p. 418, 1929).

Hab. On Vicia Kulingiana BAILEY. China:-Nanking:-Tai-ping-man (May 10, 1926, T.F. Yυ).

On Vicia sativa L. China: Nanking: Tai-ping-man (May 16, 1928, H. K. CHEN). New to China!

105) Uromyces linearis Berkeley et Broome in Jour. Linn. Soc. XIV, p. 92, 1875.

Hab. On Panicum repens L. (Hai-kibi). S. China:-Hainan Isl.: Sankô (March 27, 1939, Y. HASHIOKA). New to China!

106) Phragmidium brevipedicellatum Hiratsuka, f. in Transact. Sap-

poro Nat. Hist. Soc. XIII, p. 135, 1934.

Hab. On Potentilla Kleiniana Wight. et Arn. (Ohebiichigo). Korea:-Prov. Kôkai: Chôryôri (July 21, 1938, I. Kiyohara). New to Korea!

107) Gerwasia chinensis (DIET.) HIRATSUKA, f. nov. comb.

Syn. *Uredo constellata* BERKELEY et CURTIS in Proc. Amer. Acad. Arts & Sci. IV, p. 126, 1858; SACCARDO, Syll. Fung. VII, p. 845; SYDOW, Monogr. Ured. IV, p. 589.

Uredo chinensis Dietel in Hedwigia, XXXVII, p. 213, 1898; SACCARDO, Syll. Fung. XIV, p. 391.

Uromyces chinensis DIETEL in Ann. Myc. X, p. 206, 1912.

Spirechina chinensis Dietel in Engler-Prantl, Natürl. Pflanzenfam. II. Aufl. VI, p. 60, 1928.

Mainsia chinensis Jackson in Mycologia, XXIII, p. 107, 1931.

Gerwasia fasciculata ARTHUR et CUMMINS in Philippine Jour. Sci. LXI, p. 466 & pl. II, fig. 1, 1936.

Hab. On Rubus Buergeri Miq. (Fuyu-ichigo). Honshû:-Prov. Tango: Yoshidzu-mura (Oct. 17, 1931, Hiratsuka, f.). Prov. Tajima: Nishihamamura (Aug. 16, 1938, Hiratsuka, f.). Prov. Inaba: Tottori (April 29, May 19 & Oct. 1, 1929; March 30 & April 6, 1930; May 1, 1931, Hiratsuka, f.). Prov. Aki: Hiroshima (April 25, 1930, S. Kusano). Shikoku:-Prov. Tosa: Shinjo-mura (June, 1934, M. Kamimura); Ioki-mura (T. Yoshinaga); Susaki-machi (July 19, 1935, M. Kamimura). Prov. Awa: Taryûji-san (Nov. 30, 1935, T. Yoshinaga). Prov. Iyo: Irazu-yama (Oct. 17, 1930, T. Yoshinaga); Tachimajiri-mura (April 28, 1932, K. Kimura). Kiushû:-Prov. Chikuzen: Yoshikawamura (Dec. 28, 1931 & Jan. 3, 1937, Y. Maki); Mt. Fukuchi (Oct. 25, 1936, E. Tobinaga); Yamaguchi-mura (Aug. 29, 1931, O. Ishiuchi); Mt. Shaku-dake (Kiku-gun) (June 20, 1937, T. Katsuki). Prov. Chikugo: Miikemachi (June 12, 1935, E. Tobinaga). Prov. Hizen: Kosaza-mura (March 26, 1934, T. Katsuki). Prov. Satsuma: Imuda-ike (Oct. 17, 1933, K. Ide); Naka-gôriu-mura near Kagoshima (June 6, 1931, K. Ide).

On Rubus laciniato-stipulatus HAYATA (not Rubus formosensis Kuntze) (Keori-ichigo). Formosa:-Prov. Taihoku: Kusshaku (April 30, 1933, Y.

Hashioka). Prov. Taichû: Gojyô (Dec. 27 & 30, 1932, Y. Hashioka); Shinsha (April 12, 1930, F. Ônuma).

108) Nyssopsora Koelreuteriæ (Sydow) Tanzsch in Jour. Soc. Bot. Russie, VIII, p. 132, 1925.

Syn. Triphragmium Koelreuteriæ Sydow in Ann. Myc. XI, p. 55 & text-fig. 1913; SACCARDO, Syll. Fung. XXIII, p. 828.

Oplophora Koelreuteriæ Sydow in Ann. Myc. XIX, p. 170, 1921.

Hab. On Koelreuteria paniculata Lam. (Mokugenji) (cult.). Honshû:-Prov. Rikuchû: Morioka (Oct. 20, 19.2, G. Yamada, type!)

109) Nyssopsora formosana (Sawada) Lütjeh. in Blumea, Suppl. I, 29, VI, p. 160, 1937.

Syn. Triphramium formosanum SAWADA in Dept. Agric. Govern. Res. Inst. Formosa, Rept. LI, p. 52 & pl. II, figs. 38~40, 1931; HIRATSUKA, f. in Jour. Jap. Bot. XIII, p. 250 & text-fig. 3, 1937.

Hab. On Koelreuteria formosana Начата (Taiwan-mokugenji). Formosa:-Prov. Taihoku: Taihoku (Oct. 25, 1932; Jan. 8 & July 26, 1933, Y. Наянюка). Prov. Takao: Kuraru (Jan. 5, 1934, Y. Наянюка).

110) Nyssopsora Cedrelæ (Hori) Tranzschel in Jour. Soc. Bot. Russie, VIII, p. 132, 1925.

Syn. Triphragmium Cedrelæ Hori in Yatabe, Icon. Fl. Jap. I, no. 2, p. 150 & pl. XXXVIII, fig. B. 1~4, 1892; Saccardo, Syll. Fung. XI, p. 209; Sydow, Monogr. Ured. III, p. 180 & pl. VII, fig. 78.

Oplophora Cedrelæ Sydow in Ann. Myc. XIX, p. 170, 1921.

Hab. Gn Cedrela sinensis Juss. (Toona sinensis Roem.) (Chanchin) (cult.). Honshû:-Prov. Musashi: Tokyo (S. Kusano). Prov. Tôtômi: Mori-machi (Sept., 1927, K. Hara). Prov. Tajima; Hamasaka (Nov. 5, 1929, Hiratsuka, f.); Hatta-mura (Oct. 23, 1938, Hiratsuka, f. & M. Irie). Prov. Inaba: Tottori (May 29 & Nov. 3, 1929; Oct. 15, 1931; Sept. 18 & Oct. 30, 1932, Hiratsuka, f.; June 26, 1929, M. Yoshida; Oct. 5, 1929, H. Kotani): Ôkaya-mura (July 25, 1937, Hiratsuka, f.; Aug. 22, 1927, S. Enomoto). Shikoku:-Prov. Tosa: Nagahama-mura (June, 1903, T. Yoshinaga); Aki-machi (Dec.,

- 111) Pucciniostele mandschurica Dietel in Ann. Myc. II, p. 21, 1904. Hab. On Astilbe microphylla Knoll. (Chidake-sashi). Kiushû:-Prov. Bungo: Mt. Waitazan (May 29, 1935, E. Tobinaga). Prov. Chikuzen: Raizan (Sept. 26, 1936, Y. Maki). New to Kiushû!
- 112) Milesina Asplenii-incisi (FAULL) HIRATSUKA, f. in Mem. Tottori Agric. Coll. IV, p. 144 & pl. IV, fig. 2, 1936.

Hab. On Asplenium incisum THUNB. (Toranowo-shida). Shikoku:-Prov. Sanuki: Yashima-machi (Sept. 25, 1938, S. HIRATA). New to Shikoku!

113) Phakopsora Nishidana Ito in Ito & Homma in Transact. Sapporo Nat. Hist. Soc. XV, p. 117, 1938.

Hab. On Ficus erecta THUNB. (Inu-biwa). Shikoku:-Prov. Sanuki: Yashima-machi (Sept. 4, 1938, S. HIRATA); Hirai-machi (Sept. 17, 1938, S. HIRATA). New to Shikoku!

114) Coleosporium Pæderiæ Dietel in Ann. Myc. VII, p. 355, 1909.

Hab. On Pæderia chinensis Hance. (Yaito-bana). Honshû:-Prov. Inaba: Tottori (Oct. 22, 1938, K. Kawahara). Prov. Kii: Wakayama-shi (Nov. 28, 1938, E. Tobinaga); Setokanayama-mura (Dec. 24, 1938, Hiratsuka, f.). New to Honshû!

115) Aecidium formosanum Sydow in Ann. Myc. XI, p. 56, 1913.

Hab. On Emilia sonchifolia DC. (Usubeni-nigana). S. China:-Hainan Isl.: Retsurô (Feb. 27, 1939, Y. Наянюка). New to China!